## Claims

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What is claimed is:

- A seed comprising at least one set of the chromosomes of maize inbred line PH581, representative seed of said line having been deposited under ATCC Accession No. PTA-4432.
- 2. A maize plant produced by growing the F1 hybrid maize seed of claim 1.
- 3. A maize plant part of the maize plant of claim 2.
- 4. An F1 hybrid maize seed produced by crossing a plant of maize inbred line designated PH581, representative seed of said line having been deposited under ATCC Accession No. PTA-4432, with a different maize plant and harvesting the resultant F1 hybrid maize seed, wherein said F1 hybrid maize seed comprises two sets of chromosomes and one set of the chromosomes is the same as maize inbred line PH581.
- 5. A maize plant produced by growing the F1 hybrid maize seed of claim 4.
- 20 6. A maize plant part of the maize plant of claim 5.
  - 7. An F1 hybrid maize seed comprising an inbred corn plant cell of inbred maize line PH581, representative seed of said line having been deposited under ATCC Accession No. PTA-4432.
  - 8. A maize plant produced by growing the F1 hybrid maize seed of claim 7.
  - 9. The F1 hybrid maize seed of claim 7 wherein the inbred corn plant cell comprises two sets of chromosomes of maize inbred line PH581.
  - 10. A maize plant produced by growing the F1 hybrid maize seed of claim 9.